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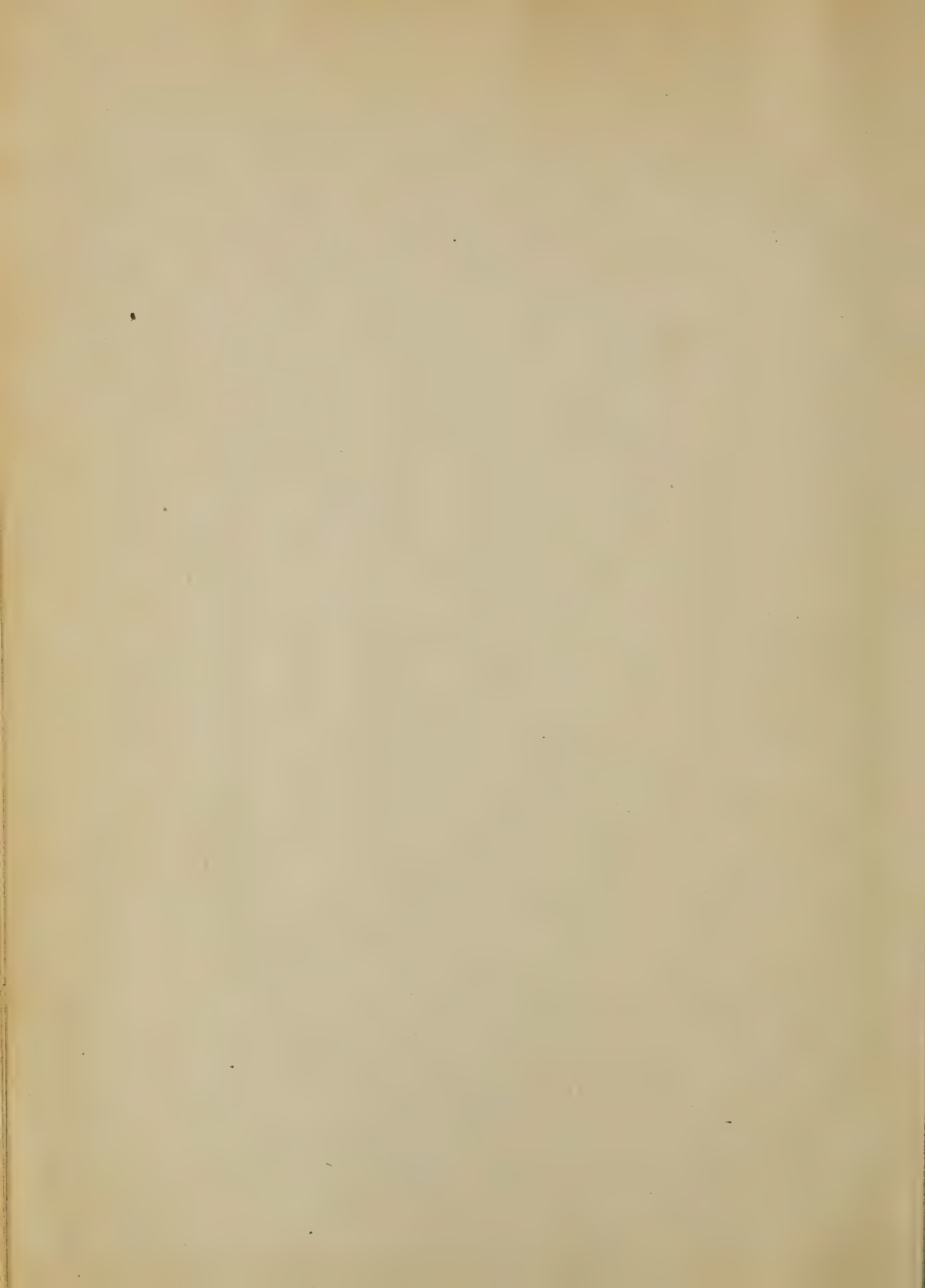
RECREATION USES
ON THE
NATIONAL FORESTS

FRANK A. WAUGH
U. S.
FOREST SERVICE
1947

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RECREATION USES ON THE NATIONAL FORESTS

A Study of their Extent and Character
With a Discussion of Public Policies
and Recommendations as to Methods
of Development and Administration

A Report to the Forester,

Henry S. Graves

by

Frank A. Waugh,
Collaborator

United States Department of Agriculture
Forest Service

1917

THE UNIVERSITY OF TORONTO

A REPORT TO THE TORONTO

WITH A DISCUSSION OF PUBLIC POLICY
AND RECOMMENDATIONS AS TO METHODS
OF DEVELOPMENT AND ADMINISTRATION

A REPORT TO THE TORONTO

HENRY J. LAMONT

BY

FRANK A. LAMONT
GALLAGHER

THE UNIVERSITY OF TORONTO

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RECREATION USES ON THE NATIONAL FORESTS

Frank A. Waugh

Henry S. Graves, Forester,
Forest Service,
Department of Agriculture,
Washington, D. C.

Sir:

Acting under your authorization I have recently visited many of the National Forests in all parts of the United States and have made a special study of the recreation uses now developing in these areas. The purpose of this study has been to determine as clearly as possible what policies should govern in the development and administration of these recreation uses, in what ways and to what extent the Forest Service might direct this development, and what methods of organization and adminis-

Mr. G. B. ...
Forest Service
Department of Agriculture
Washington, D. C.

Sir:

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to the National Forestry Conference
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velopment and administration of these
recreation areas, in what ways and to
what extent the Forest Service might
direct this development, and what
methods of organization and adminis-

tration would give the maximum efficiency in this field.

At the outset I will give a brief review of my investigations made on the Forest areas, taking these up in chronological order and making such suggestions and criticisms as occurred to me at the time. Practically all of these suggestions and criticisms were discussed on the ground with the responsible officers of the Service there in charge. Many of the suggestions have already been carried out, as indeed some few of them were adopted in advance of my appearance in the discussion. The instances are few, I believe, in which my recommendations on specific points run counter to the judgment of Forest officers in charge. In general these suggestions are not to be too seriously taken, it being remembered

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entire Service in charge. In general
these suggestions are not to be too
carefully taken, it being remembered

that all were necessarily based on hasty examinations. These suggestions are to be understood mainly as looking forward toward the wider recommendations covering general policies and administration in the later sections of this report.

District 7

Blue Ridge Mountains

Natural Bridge Area

During the period from April 6 to April 14 I visited the Natural Bridge area of the Blue Ridge Forests in company with Assistant Forester H. A. Sherman, District Forester W. L. Hall, and Forest Examiner J. H. Fahrenbach. We made headquarters at Apple Orchard, and spent most of the time in that neighborhood. I found this section very interesting, the landscape unusually beautiful,

and the recently constructed Forest Service trails especially satisfactory. They seem to be the best trails I have found anywhere on the forest areas. The following suggestions have already been submitted in writing to District Forester W. L. Hall.

1. Continue the work of trail building. It is to be hoped that the high standard of location and construction already established can be maintained.

2. At a considerable number of points outlooks should be opened from these trails. Wherever possible these outlooks should come at turns of the trail. At these points it would be advisable to provide simple rustic seats.

3. Mark the trails with simple markers giving directions and distances.

4. Provide special side trails and markers for fine views not on trunk line, e.g., at Apple Orchard Mountain, Apple Orchard Falls, Black Rock, etc.

5. Locate, improve, name and mark especially favorable camp sites, as at Big Spring (Mons).

6. Encourage the establishment of permanent camps or resorts like that kept by Mr. Patterson at Apple Orchard. Good camps fitted with tents would probably prove satisfactory for summer months. Camps of this sort are being extensively and successfully used at such widely separated points as Yosemite National Park, Yellowstone National Park, and Lake Champlain, Vermont.

7. Encourage the building of permanent summer camps or homes by individuals on special use permit.

6. Reviewing special

and some for this
not on camp line
Camp and some, some
Wells, Black Box, etc.

7. Locating, however, none

and work especially favorable
when, as at Big Spring (Hanna).

8. Encourage the

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sorts like that kept by Mr. Foster
and at Apple Orchard. Good camps
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used at such widely separated

points as shown by the map

the annual distance between

the two points

the distance between the two

the distance between the two

the distance between the two

8. Publish a cheap map of the section showing trails and points of interest.

9. Stock the streams with trout. Protect game of all sorts.

10. Make a "country planning" study of Arnold's Valley section based on a proper scheme of economics and social development. This is a project which I discussed at some length with District Forester Hall, and in which I know he is especially interested.

District 3

Bandelier National Monument

On April 26 I visited Rito de los Frijoles, Bandelier National Monument, 32 miles northwest of Santa Fe, New Mexico, accompanied by Assistant Forester E. A. Sherman, and Supervisor Joseph C. Kircher. The place was revisited

1. Study the system with

view to protect some of all sorts.

10. Use a "country plan"

study of Arnold's Valley con-

tion based on a proper scheme of

This is a project which I discussed

at no length with District

and Mr. Hall, and in which I know he

is especially interested.

On April 25, 1911

on August 22. This monument includes extensive cave dwellings, a remarkable old pueblo in horse-shoe form, and other interesting Indian relics. It has been the scene of extensive archeological explorations, and has been celebrated in Bandelier's poetic-scientific book "The Delight Makers". The surrounding mountains and forests are notable for their picturesque beauty, so that the section is one which may rightfully appeal to a large number of excursionists. I would offer the following suggestions:

1. Possibly a new and better route could be found crossing the Rio Grande near the mouth of the Rito de los Frijoles, and coming up the canyon. This would, however, be difficult, and is not essential. It seems to me very

on August 22, 1910, this
includes as follows: two large dwellings,
a considerable old building in the
back town, and other interesting
Indian relics. It has been the
scene of extensive archeological
excavations, and has been
placed in the hands of the
National Museum. The following
notes and reports are submitted
for their consideration, and
that the section is one which
is especially open to a large
part of the population. I would
offer the following suggestions:
1. The section is one which
is especially open to a large
part of the population. I would
offer the following suggestions:
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desirable however that a preliminary survey of this project should be made in order to determine its feasibility.

2. The various Indian relics will soon need considerable further care for their preservation. Appropriations for this purpose should be forthcoming in the near future. Careful surveys should be made on the ground in order to determine the extent of such work, and to estimate carefully the necessary expenditure.

3. The Forest Service should cooperate with duly accredited archeological societies for the further exploration of the grounds.

4. The relics obtained from these ruins in the progress of exploration, excavation and repair should be housed on the area in an appropriate exhibition room which should be a part of an administration building under the

It is desirable however that a preliminary survey of this project should be made in order to determine its feasibility.

2. The various Indian tribes

will soon need considerable further data for their preservation. It is therefore for this purpose should be determined in the near future. The survey should be made on the ground in order to determine the amount of such work, and to estimate exactly the necessary expenditure.

3. The Forest Service

should cooperate with the local authorities in the further exploration of the grounds.

4. The action obtained

from these tribes in the progress of exploration, examination and preservation should be based on the action in an appropriate exhibition room.

It should be a part of an educational exhibition.

care of the custodian.

5. The many important points of interest should be inconspicuously marked. A small guide book should be published which might be sold to tourists, say at ten cents each. This is rather important.

6. The foot trail along the base of the cliff should be improved, having due care not to disturb present conditions more than absolutely necessary.

7. The facilities now maintained by Judge A. J. Abbott for the entertainment of visitors will soon need to be considerably extended. Some kind of layout for a much larger permanent camp should be made at once.

6. The very important
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conspicuously marked. A small
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7. The foot trail along
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District 3

Sante Fe Forest - Pecos Division

On April 27 and 28 I visited the Pecos River Valley in company with Assistant Forester E. A. Sherman, Forest Supervisor Joseph C. Kircher, and Forest Examiner Aldo Leopold. We also examined a number of the small tributary creeks with a view mainly to the inspection of allotments already surveyed for summer homes under term permit. The upper portions of the Pecos Valley visited are narrow, with steep high mountain walls, considerable timber and charming scenery. The Forest Service road from Valley Ranch to Camp Overton Price, now partially constructed, is good.

The summer home allotments now surveyed are in Rito

On April 27 and 28 I visited the Neos River Valley in company with Assistant Forester E. A. Sherman, Forest Supervisor Joseph C. Kitchen, and Forest Ranger Alvin Leacock. We also examined a number of the small tributary creeks with a view mainly to the inspection of riparian lands already surveyed for summer homes under town permit. The upper portions of the Neos Valley visited are narrow, with steep high mountain walls, considerable timber and charming scenery. The Forest Ranger road from Valley Ranch to Camp Overton Place, now partially constructed, is good. The summer home sites mentioned are in this

Espiritu Santo, Willow Creek, and Winsor Creek. Those in the first- and last-named creek valleys are very attractive. Those in Willow Creek are made practically unavailable for our purposes by the development of a copper mine at the mouth of the creek. The space may prove valuable later as a site for camps or permanent homes for mine operatives. Regarding this general territory I would make the following suggestions:

1. The summer home lots in Rito Espiritu Santo and Winsor Creek are very satisfactory with respect to location and size.

2. It seems, however, that the location of lots was made in advance of the location of a road which is to serve them. It would be better to reverse the order, and as far as possible to make all lots bound upon the road.

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Creek are made practically unusable
also for our purposes by the de-
velopment of a copper mine at the
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prove valuable later as a site for
camps or permanent houses for mine
operatives. Regarding this and
other territory I would make the
following suggestions:

1. The summer home site
in the upper half and lower
Creek are very satisfactory with
respect to location and size.
2. It seems, however,
that the location of lots was
made in advance of the location
of a road which is to serve them.
It would be better to reverse the
order, and as far as possible to
make all lots bound upon the road.

3. It is altogether clear that these roads should be located by a landscape architect rather than by a highway engineer.

4. Means should be found, if possible, to protect summer homes from grazing cattle without fencing in individual lots.

5. Apparently provision will have to be made whereby permittees may keep horses outside their allotments.

6. Some uneasiness has been felt regarding sanitary requirements. In my judgment the use of common pit privies suitably screened and annually moved, will be entirely safe in this area.

7. The Forest Service should interest itself actively in game preservation in this district, and especially in the stocking of the streams with

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trout, inasmuch as this territory will always be especially desirable to men who are fond of hunting and fishing.

8. All timber cutting and logging operations in the immediate vicinity of these summer homes should be conducted with careful regard to the reasonable desires of permittees as well as to the protection and preservation of the more obvious recreational values.

9. A considerable number of home sites are available in addition to those already surveyed in the canyons named, and in others, particularly in Panchuella Creek.

10. The lots already surveyed are large, averaging about one acre. It is possible that some subdivision of these lots may

be advisable at a time some distance in the future.

11. On this area, as in all similar areas, the Forest Service should exercise some supervision as regards the style of houses and other buildings to be erected, the plantings or thinings to be made, and in general of all so-called improvements by permittees. The principle to be kept in view is that the grounds should always be made attractive, and that no single permittee should be allowed to do anything which would interfere seriously with the general good.

12. Outside of the territory already surveyed for summer home sites there exist many fine opportunities for temporary tent camps. Such opportunities should be kept open and may be advertised

on this point at a time when the

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the general good.

12. Consider of the

very many things for

house sites that exist many times

in the same place

and in the same place

and in the same place

as the local forest officers see fit.

13. The Forest Service should exercise its best benevolent influence upon owners and occupants of patented land along the Pecos River, with a view to preserving the scenic charm of the vicinity and controlling sanitary conditions.

District 3

Grand Canyon National Monument

The time from May 3 to May 11 was spent at the Grand Canyon. This period was devoted wholly to a study of the many complicated and interesting problems there presented. Various members of the Forest Service staff were present and assisted in the explorations and discussions. Assistant Forester E. A. Sherman, Assistant District Forester F. W. Pooler,

Forest Examiner Aldo Leopold, and Deputy Forest Supervisor T. Earl Wylder should be especially named.

The Grand Canyon is in effect a great national park. On this area recreational uses completely overshadow all other possible purposes. The whole situation must be discussed therefore frankly on its merits as a national park problem.

At the outset I would like to emphasize one fundamental principle, viz., the actual trustees of any park (municipal, state or federal) should exercise a positive and controlling influence in the planning and development of the territory. I would place considerable weight upon this issue, both because of its fundamental importance, and because various projects under various branches of the government of the United

These findings are significant, and

they have been reported to the

relevant agencies for their consideration.

The present situation is

that a great deal of work

is being done in this

direction, and it is

hoped that the results

will be of great value

in the future.

Very truly yours,

John F. Kennedy

President of the United States

Washington, D. C.

Enclosure

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States have hitherto been managed in an entirely different way. The customary practice has been merely for the government to regulate activities initiated by others. It should be perfectly clear, however, that unless the central authority can supply the initiative whereby is determined the physical plan, the line of growth, the general policies, the form of organization and maintenance as a public park, the whole development will be haphazard, undirected, fortuitous, and the results wholly inferior to what they would be under the opposite policy.

It seems to me that the Grand Canyon at this moment offers a unique and remarkable opportunity to break away from this time-honored method of government management, and to illustrate to a public which

greatly needs the instruction, the advantages of a stronger initiative and of a far-sighted constructive plan based upon the best technical information available.

The Technical Problems

The Grand Canyon presents two problems, fairly distinct, though physically related. First is the development of an orderly community on the canyon rim; second, and much more serious, is the development of the national park proper, the major portion of which lies below the rim.

In approaching the solution of these problems we are faced by two quite extraordinary conditions. These are (a) the dominance of the Atchison, Topeka & Santa Fe railroad, and Fred Harvey interests at the canyon; (b) a general expectation that the Grand Canyon national monument will presently be trans-

ferred to the Department of the Interior to be administered as a National Park.

With reference to the first condition, it should be said that the presence of such strong private interests upon the grounds makes it all the more obligatory that the United States government should exercise a strong influence in behalf of the general public. This influence cannot be exercised unless the government is able to formulate perfectly clear cut and definite policies, and unless the government is able further to decide upon a definite working plan for the physical development of the Canyon. Such a problem of physical development must obviously look forward many years toward the future.

The fact should be recorded further that the railroad

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and Fred Harvey interests have shown a most praiseworthy breadth of view with reference to the activities of the Government in the development and control of the Grand Canyon. They have repeatedly and expressly emphasized their wish to cooperate with the Forest Service in this work and to accommodate themselves to any plan which the Government may provide. Although these interests are to a considerable degree independent of Government control through their ownership of 20 acres of land in a commanding position upon the canyon rim, they have gone so far as to offer the modification of their own plans upon this territory wherever it might be necessary to facilitate developments planned by the Forest Service.

With respect to the second condition mentioned, viz. the expec-

and that Norway interests have shown a most pronounced interest of view with reference to the activities of the Government in the development and control of the Great Canyon. They have repeatedly and expressly emphasized their wish to cooperate with the Forest Service in this work and to associate themselves in any plan which the Government may provide. Although these interests are to a considerable degree independent of Government control through their ownership of 50 acres of land in a commanding position upon the canyon rim, they have gone as far as to offer the mobilization of their own plans upon this territory whenever it might be necessary to facilitate developments planned by the Forest Service.

With respect to the second condition mentioned, viz. the ex-

tation that the Grand Canyon will some time be transferred to the hands of the National Park Service, it must be said that there is no telling when this transfer will be made. Under present conditions it would seem that the necessary legislation may be several years in coming. In the meantime, any failure of the Forest Service to develop working plans and policies places the future of the Grand Canyon in serious jeopardy. Even if the transfer should be made at a comparatively early date, it would seem altogether better to turn over a live, going, working project rather than a blank sheet devoid of all plans. All things considered, the conditions are such as to place upon the Forest Service with special urgency the duty of developing at the earliest possible

moment consistent with careful study, the necessary working plans, both for the canyon rim and for the greater territory below the rim.

The Community on the Rim

There has grown up about the Santa Fe railroad station a small but substantial community. This little village continues to grow, and will apparently take on more and more the character of an ordinary town as time goes on. Inasmuch as the major portion of this territory is under the direct control of the Forest Service (the principal exception being the 20 acres of "station grounds" owned by the Santa Fe interests), being managed wholly under permit, the responsibility of the Forest Service for the physical form of the village development is especially

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territory is especially

direct. This area presents a problem in community planning not materially different from problems existing in any ordinary village. Such questions have been extensively studied in the past few years, and the general methods for meeting these problems are pretty well understood amongst landscape engineers.

There are three principal parties interested in the development of this community. These are:

(a) United States Government, now represented by the Forest Service.

(b) The Atchison, Topeka & Santa Fe railroad with the Fred Harvey interests.

(c) The outside public, - residence and business interests not identified with either of the other parties mentioned.

Several physical elements

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(b) The American People
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to their interests.
(c) The outside public, in-
terested in business interests
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other parties mentioned.
Several physical elements

enter into this problem. The most important ones are (a) water supply; (b) the possibility of other railroad or transportation companies entering the village; (c) the possibility of developing other community units in the vicinity; (d) provision for new commercial interests of considerable scale on other parts of the land; (e) the 20 acre tract of patented land in the hands of the railroad, (f) certain mining claims of a more or less dubious nature.

Water Supply: - An independent and adequate water supply seems essential to the development of a democratic working community at Grand Canyon. There are several possibilities of supply from various sources, as from the San Francisco mountains or from Bright Angel Creek. There are also

to be considered various ways by which such an enterprise could be financed, either by the federal government, by the municipality, or by a public service corporation under government regulation. It is not possible with information now available to say what method of management would be best for existing conditions, or what source of supply would be most available. I would recommend, however, that a careful study be made at the earliest possible moment by some competent person representing the Federal government, and that a report be made upon the available sources of water, the cost of development, with recommendations for procedure.

Other transportation facilities: - It is possible of

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Other Transportation

Reconstructions: - It is possible to

course that another railroad may build into this community. It is more likely that automobile lines will be developed handling tourists into Grand Canyon from other points along the railroad, e.g., from Flagstaff. These possibilities have to be taken into consideration in the development of any plans.

Other Community Units: -

On the other hand it is altogether possible that other community units may be developed along the rim, either on the south side or the north side of the Canyon, through the establishment of new hotels and resorts, and through the building of other railroads or the entrance of other transportation facilities to other points. These possibilities also have to be kept in view in the preparation of any plans.

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Other Community Interests

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Other Commercial Inter-

ests: - At the present time the problem of providing for other commercial interests outside of the Atchison, Topeka & Santa Fe railroad and the Fred Harvey corporation seems particularly troublesome. A few permittees have expressed serious dissatisfaction with existing conditions, and do not seem to be pleased with anything which the Forest Service has been able to offer them thus far. Whether their strictures are just or unjust these interests are wholly legitimate. They represent a perfectly natural and reasonable demand which must be met to the fullest extent possible.

Altogether it seems essential that a thorough-going study be made and a working plan prepared at the earliest practicable moment

Other Considerations

At the present time the problem of providing for other than one of interests outside of the children, Thomas & Santa Fe railway and the Fred Harvey corporation seems particularly troublesome. For committees have expressed their dissatisfaction with existing conditions, and do not seem to be pleased with anything which the Forest Service has been able to offer them thus far. Further their criticisms are not so much of the interests as wholly legitimate. The Forest Service is not likely to meet the economic demand which must be met to the fullest extent possible.

Altogether it seems essential that a thorough-going study be made and a working plan prepared at the earliest possible moment.

covering the expected development for the community on the rim. The writer has already made extended studies of these problems and hopes to be able at an early day to submit working plans for this particular territory.

The Park Proper

The village of Grand Canyon at its best will be only a practical convenience and quite a minor accessory to the park itself. This magnificent territory will include relatively narrow strips of the flat timbered land along the north and south rims of the Canyon, but will consist principally of the territory within the Canyon itself - the country "below the rim." This Canyon is the unique landscape which alone attracts the visitor, and by its extraordinary wonders and beauties justifies the erection and maintenance of a federal

devoting the expected \$100,000
for the community on the river. The
writer has already made extended
studies of these problems and hopes
to be able to do so very soon.
His working plans for this project
are satisfactory.

The Grand Canyon

The village of Grand Canyon
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bordered both along the north and
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the visitor, and by its extraordinary
workman and beautiful facilities the
erection and maintenance of a Federal

park. The great and primary problem lies in the development of this tract in such a manner as to reveal its beauties to the fullest possible extent and to the largest possible number of visitors.

The technical problems of the landscape engineer are easily stated, though their solution may be difficult enough. The principal steps to be taken are as follows:

1. To preserve the tract in its pristine character, - to defend it, both above and below the rim, from all defacement and from the intrusion of all exotic features. Such accommodations as will be required for the comfort and safety of visitors, and even the visitors themselves, will seem to infringe upon this ideal; but this infraction is a quite necessary element in the problem, and moreover

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safety of visitors, and even the
visitors themselves, will have to
influence upon this ideal; but this
involvement is a quite necessary

it is so slight that it may be fairly overlooked. Care must be exercised, of course, to see that this unavoidable intrusion does not work unnecessary injury to the original character of the Canyon.

2. To make the Canyon accessible. It must be accepted as a fundamental principle that the Canyon is to be opened up to the fullest possible extent and to the largest number of visitors.

3. To provide safe and easy means of descent into the Canyon. Only a trifling fraction of the park lies above the rim, and whatever beauty there may be in the views from the hotel porch and from the rim drives, they too are a mere trifle compared with the splendid panorama spread before the visitor who explores the endless mesas and side-canyons below the rim and who

looks up to the brilliant walls of earth and rock and to the clear blue sky above. There may always be a difference of valuation placed on the views from the rim compared with those from the Canyon below, but to my own taste (and I claim to be a specialist in landscape) the scenery below the rim is worth a hundred times all that can be seen from the rim looking down. Certainly if the park is to be really opened up to visitors it must be possible for visitors to get into it. It appears from the best estimates available that under existing conditions less than five per cent of all visitors to the Grand Canyon do actually descend to the bottom.

4. To provide suitable means of transportation to the points of principal interest within the Canyon and on both rims.

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4. To provide suitable
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of principal interest within the park
you and on both sides.

5. To determine upon the points of principal interest. This is a matter of considerable delicacy and one on which good taste, experience and patient exploration must combine in order to achieve a satisfactory result. Briefly it may be said that these points chosen for special emphasis must be (a) typical, (b) they must be as diverse as the resources of the Canyon offer, (c) they must be thoroughly worth while in themselves, and (d) they must be presented to the visitor in some logical and convincing order.

There are also many practical problems of no mean measure, such as the location and construction of trails, the building of bridges, the location of camps, the development and conservation of water, the protection of wild life;

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but these are entirely incidental to the fundamental problems outlined above.

It will be seen, I think, that these problems, so easily stated, are by no means so easily solved. Rather is this an undertaking of the largest order. Indeed it is the simple truth to say that, in proposing to make a logical working plan for the Grand Canyon which shall tend at once to make the Canyon socially serviceable and to enhance its esthetic effect, we are undertaking the greatest work of landscape engineering ever seriously considered anywhere in the world.

As to Procedure

It seems to me clear beyond all dispute that such a plan should be formed as soon as possible and with the greatest care to make sure that it is the best plan

humanly available. Such an enterprise as the one at the Grand Canyon should not longer be permitted to drift along in a purely haphazard aimless manner; nor should it be expected that a benevolent bureaucratic regulation of concessionaires will supply the necessary initiative and direction for so great an undertaking.

From the foregoing discussion my recommendation is sufficiently clear. It is that the best possible plan be made at the earliest practicable moment; that to this end the best engineers and landscape engineers be employed; and that, at appropriate stages of development, these plans be subjected to the fullest criticism, both public and technical.

I assume that the Government of the United States, repre-

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sented by the Forest Service and its successors at the Grand Canyon, is the only appropriate agency for the initiation of such a plan. It is conceivable, of course, that the permittees might employ the needful designers for the preparation of such a plan; or that the American Institute of Architects or the University Landscape Architects' Society or some other similar body might volunteer the preparation of a plan; and it is possible that a perfectly good working plan might come from such sources; but as a point of public policy it would seem to me wholly discreditable for the Government of the United States thus to depend on volunteer outside sources for its plans and its initiative.

What next? After a satisfactory plan shall have been secured

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What next? After a series
of preliminary steps have been completed

through tireless study and fearless criticism and shall have been officially accepted, what steps shall be taken for its realization? The plan certainly is not an end in itself. Users of the Grand Canyon will benefit only by the concrete works accomplished in accordance with the design. What part shall the Federal Government play in carrying out the plan?

I do not hesitate to reply that, according to my own theory of government, the entire development of this public property should be made under public direction and at public expense. The extensive works accomplished in recent times in municipal and state parks in America have almost without exception conformed to this principle. Yet I fear that, under all existing circumstances, it may

be impossible to adhere strictly to this sound principle in the development of the park in the Grand Canyon.

Without entering upon any discussion of the difficulties intervening I will say at once that I would think it better to adopt some reasonable compromises than to delay too long with the development of the property. In short it would seem more sensible to accept the work of reliable concessionaires carried out under strict government supervision and in accordance with an approved plan than to insist on the theoretically better method of direct government construction where such insistence would mean serious delay in opening up the Canyon to the public.

Putting this idea into practical terms, and assuming that federal funds will not be promptly

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Putting this idea into
practical terms, and assuming that
Federal funds will not be promptly

available for the prosecution of all desirable improvements at the Canyon, I would recommend that the Forest Service or its successors should cooperate freely with responsible permittees in carrying out various items of an approved plan. In particular I should think it practicable to leave to concessionaires the development of hotels, camps, supply stores, souvenir shops and similar establishments catering commercially to the needs of visitors. The building of trails presents a much more difficult problem, as all trails, wherever and whenever built, should be open to the public practically without charge. However if opportunity should offer for the building of new trails in accordance with an adopted plan and under terms fully safeguarding the public interests,

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financing the work from other than federal funds, it would seem wise to give favorable consideration to such offers.

In my view the construction of some safe and easy means of transportation from the rim to the interior of the Canyon is sine qua non to all plans of real park development. How to finance the construction and operation of such a public utility presents still another question. Certainly it would be theoretically the most desirable way to have such a utility built and operated by the park management itself. Yet as a practical matter I do not hesitate to urge that these facilities be provided at the earliest possible moment; and that, should private funds offer for the purpose, the opportunity be accepted by the park management. I would

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distinctly stipulate that any permits for such construction and operation should include the following requirements:

1. Strict conformity to park plans in location and construction.

2. Conformity to government requirements as regards style of construction, materials, design of terminals, provision of safety devices, etc. etc.

3. Government regulation of operation, tariffs, etc.

4. Provision for taking over the entire property by the Government.

District 3

Walnut Canyon National Monument

This territory was visited on May 14th in company with District Forester E. A. Sherman, Supervisor John Guthrie, Forest Examiner

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...on May 14th in company with ...
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Aldo Leopold, and Assistant District Forester F. W. Pooler. The territory proved to be unexpectedly interesting, and the Indian relics very good. While this park may never attain a great national reputation, its preservation as a national monument is distinctly worth while.

It would seem that certain repairs on the trail, and further protection of the ruins are desirable, but I understand that they are already provided for in a service project, upon which the money has become available July 1, 1917.

The time may come, perhaps in the near future, when this tract will be so extensively used as a public park that more elaborate service equipment will be required. For example, it may be necessary within the next few years to provide special parking space for

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automobiles near the ranger station, perhaps build a new ranger station with space for the accommodation of visitors, to put up public sanitar-ies, provide public camp grounds, and possibly to supply other accessories of the usual park layout for the entertainment of visitors. I would specifically recommend that, as soon as such a demand has become manifest, the entire tract be given careful study by a competent landscape engineer, and a working plan provided in advance of any important alterations or expensive improvements.

On the same day while at Flagstaff our party visited the Experiment Station at Fort Valley, and also investigated the water development now taking place at Crater Lake, north of Fort Valley. The work which we saw at both these places was very interesting, but no recommendations on my part seem necessary.

Antennas near the Ranger Station.
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District 3

Roosevelt Lake Area

On May 15 and 16 I visited Roosevelt and the surrounding territory in company with Assistant Forester H. A. Sherman, Assistant District Forester F. W. Pooler, Supervisor W. H. Goddard, and Forest Examiner Ward Shephard. At this point we also met Mr. E. O. McCormick, vice-president of the Southern Pacific Railroad, and Mr. Mark Daniels of San Francisco, architect and landscape engineer, advising the Southern Pacific interests regarding their proposed work at Roosevelt. We held several conferences and had an opportunity to look over the plans now in hand by the Southern Pacific Railroad Company for building a hotel on the shore of the lake under Forest Service permit.

On May 10 and 11 I visited
Hosmer and the surrounding territory
in company with Assistant Forester
E. A. Sherman, Assistant District Forester
F. W. Foster, Supervisor W. H. Hubbard, and Forest Ranger
Vernon Ward Hubbard. At this point
we also met Mr. E. O. McGowan,
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of San Francisco, architect and
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Southern Pacific interests regarding
the timber proposed work at Hosmer
Lake. We held several conferences
and had an opportunity to look over
the plans now in hand by the Southern
Pacific Railroad Company for building
a hotel on the shore of the lake under
Forest Service permit.

On the basis of these observations I would recommend that the Forest Service should encourage the Southern Pacific Railroad to go ahead with this resort plan, subject to the approval of the Forest Service at all stages. The fact that the Railroad Company have employed a competent landscape engineer and architect to look after their development would indicate their intention and ability to do the work in a satisfactory manner.

Community Development: -

About the Dam there is growing up a small village. In fact the buildings now occupied jointly by the Forest Service and by the Reclamation Service (Department of the Interior) in themselves constitute a village locally known as the "Government Grounds."

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Small Villages

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It seems highly desirable that such a community growing up under government direction and patronage should have the best possible development. It ought to grow in conformity to a well-ordered plan. The scattered, haphazard, disorderly form of a mining camp is neither practically satisfactory nor intellectually creditable to a community of this sort.

I therefore recommend and urge that every effort be made to provide at the earliest possible moment a satisfactory community plan for this territory. The problem here is technically much like that at the present village of Grand Canyon, though the physical and social elements are quite dissimilar. No satisfactory plan can be made except by a competent architect or landscape engineer after thorough

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landscape engineer after thorough

study of the situation on the grounds.

Tonto National Monument : -

At this point we made a brief examination of the cliff dwellings in the Tonto National Monument. These are distinctly interesting and will be especially valuable on account of their proximity to the proposed resort development at the Roosevelt Dam. The ruins should be restored and protected, and some further trails should be built into the area. The Forest Service trail recently constructed is satisfactory, and, I understand, was provided at a very low expense. Relatively small expenditures are needed in this territory at the present time, but these valuable Indian relics should not be wasted for the lack of such small sums of money. Effective preservation of

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the prehistoric relics should obviously precede any further opening of the territory to visitors by means of easy trails.

District 5

Arroyo Seco, Angeles Forest

This canyon was visited on May 22 in company with Assistant Forester E. A. Sherman and Assistant District Forester L. A. Barrett. Here we find a narrow canyon with few natural advantages for the development of summer homes, aside from the extraordinary demand caused by the propinquity of Los Angeles and Pasadena. The citizens of these towns however seem so anxious to find a retreat in the mountains anywhere that they have taken up every available inch of the space. The use here in summer home development is very intensive. Indeed it seems

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viously preclude any further open-
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SECTION I
LOCAL HISTORY AND PRESENT

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is very extensive. Indeed it seems

that the limited area is already too crowded, and that no further permits of this character can well be granted. Still the service rendered here seems on the whole very satisfactory. Little more remains to be done on the part of the Forest Service to bring it to its highest point of usefulness for the summer permittees.

The lack of sanitary precautions in the canyon seems somewhat alarming. Nevertheless I understand that the case is thoroughly in hand; that the permittees themselves, largely citizens of Pasadena, have formed an association for the protection of their common interests; that the question of protection of water supply has been specially considered and satisfactorily settled; and that the Forest Service

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is absolved from all further responsibility on this account. I trust this is the fact, but I have no doubt that the forest officers in charge will make every effort within their power further to insure the protection of the permittees in the Canyon, and of the citizens of Pasadena who use water from that watershed.

District 5

Canyon Santa Anita, Angeles Forest

This territory was visited on May 23d in company with Assistant Forester E. A. Sherman, and Assistant District Forester Barrett. We also met the ranger in charge, Mr. Zachau, and had his kindly assistance in looking over this tract.

Santa Anita canyon is considerably larger than Arroyo Seco, carries more water, and is much better

is objected from all further responsibility on this account. I trust this is the fact, but I have no doubt that the forest officers in charge will make every effort within their power further to insure the protection of the game trees in the Canyon, and of the citizens of Pecos who use water from that watershed.

San Juan

San Juan and the Rio Grande

This territory was visited on May 2nd in company with Assistant Forester H. A. Sherman, and Assistant District Forester Barrett. We also met the ranger in charge, Mr. Nathan, and had his kindly assistance in looking over this tract. Santa Anita canyon is considerably larger than Arroyo Seco, and is much better supplied with water, and is much better

furnished with trees. On this account it is a distinctly more attractive locality than the one examined the day previous. The canyon now contains 196 summer homes under permit, and five public resorts. It seems possible that a few more summer home sites might be developed through the expenditure of considerable effort; but on the whole the territory is already fully occupied. Here, as in Arroyo Seco, it seems as though there is some danger of crowding, and of reproducing those conditions of congestion which the permittees especially desire to escape in coming to the canyon.

The Forest Service has built, with some outside cooperation, a fine trail from a point near the village of Sierra Madre into the canyon. This trail is decidedly

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a fine trail from a point near the
village of Sierra Blanca into the
canyon. This trail is decidedly

picturesque, developing many fine landscape outlooks. It is moreover, a practical convenience of the first order, since over it all the materials for building and supplies for living must be carried into the canyon. The trail is also used extensively by persons going through to points farther in the forest both for business and pleasure. I am told that as many as 200 or 300 visitors a day frequently pass over this trail, and the congestion has been so great that it has been necessary to prepare special rules for the movement of pack trains on the trail.

A new trail in the bed of the canyon on easy grade has been surveyed, and has been recommended by the local ranger, who estimates that it will cost \$2,500 to cover the necessary distance of about two and one-half miles. I understood

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further that about \$2,000 had already been subscribed by the resident permittees in cooperation for the building of this proposed trail. It seems to me that under these conditions the work ought to be carried out at an early date.

The scenic values on the existing trail and in the canyon could be considerably enhanced by the careful work of a landscape engineer and by some moderate reconstruction. Such work may be taken up at any time when the necessary funds and talent are available.

At the present time it would seem desirable to have some further development of community cooperation within the canyon. In my judgment, something should be done in the physical equipment of the area to help toward this end. Some sort of community center

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Some sort of community center

should be provided by the Forest Service. Perhaps by cooperation with an organization of the permittees a community house could be built, perhaps an outdoor theater, perhaps a branch library could be established, perhaps a central camp fire could be provided at which meetings could be arranged weekly or more frequently. These suggestions merely indicate the direction in which it seems to me improvement could be taken up and directed by the Forest Service itself.

District 5

Lagunas Mountain, Cleveland Forest

Our visit to this territory occupied the time from May 26 to May 31 inclusive. Our Forest Service party was made up of Assistant Forester E. A. Sherman, Assistant District Forester L. A. Barrett, Forest Examiner W.H.Friedhof, and the writer.

We spent a very pleasant five days in the ranger station camp and made an extended examination of the territory here which it is proposed to use ^{as} a summer home area under special use permit. It is expected that the tract will be particularly useful to the citizens of the Imperial Valley on the east, and of San Diego on the west.

The area under study presents a fine tract of land of 1000 acres or more, very well adapted to the purpose in view. The average elevation is 5,500 feet, without any great variation. A few small peaks exceed 6,000 feet, but on the whole the tract is reasonably level, is nicely timbered, Jeffrey pine and black oak predominating, and appears to have an adequate water supply. At several points there are attractive small streams.

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At several points there are attractive
fine small streams.

There appears to exist a very definite and strenuous demand for the summer home permits which the Forest Service proposes to issue. The existence of such a definite demand to some extent clarifies the study of the problem. After examination of the tract I have the following suggestions to make:

1. The main Forest Service road connecting with the state highway at a point approximately seven miles south of the tract in question seems to be very satisfactory, as is also the proposed location of the main access road on the tract itself.

2. The main road should be built now approximately on the location of the old Morris road. Other roads, such as the Rim Drive, may be built later as needed, and as funds are available.

3. I should also recommend

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as funds are available.

3. I should also recommend

strongly that a plan should be held in view of carrying the main road eventually through the entire area and out to the north or west by another route, making it possible to pass through the tract without coming out at the point of entrance.

4. Spur roads or side loops may be built, probably on grades not exceeding six per cent, into the side canyons and other areas as the settlements develop, and as the roads may be required.

5. A few residence sections should be reserved into which wagon and automobile roads are not built. I have in mind especially the lower course of the Escondido canyon, and the Agua Dulce, though the same suggestion may apply with even greater force to other tracts after the situation has developed further. These territories may be

held in view of the fact that the main

line runs out to the north of

west by another route, making it

possible to pass through the forest

without coming out at the point of

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where the situation has developed.

made accessible by trail open to foot passengers and horses. Certainly the added privacy gained by keeping out wagons and automobiles would be distinctly desirable to some permittees.

6. Other trails, not of a service nature, but intended chiefly for sight-seeing should be developed as soon as practicable to such points as Wooded Hill, Monument Peak, Desert View, Noble Canyon, and other points of interest. Some of these routes will eventually be developed into automobile roads; others will always remain foot paths.

7. The sub-division of lots, already studied on the ground, especially by Mr. W. H. Friedhof, seems to be generally satisfactory, both as to size and arrangement. No doubt the expenditure of additional time and study on the grounds might

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would be distinctly desirable to
some extent.

6. Other trails, not of

a service nature, but intended
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be developed as soon as practicable
to such points as Wooden Hill, Horse-
meat Park, Desert View, Noble Canyon,
and other points of interest.
Some of these routes will eventually
be developed into automobile roads;
others will always remain foot paths.

7. The sub-division of

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time and study on the grounds

secure additional perfection of detail; and considering the extended use to which this territory will probably be put, and the long time which the original plan will remain in service, it seems fair to recommend that the fullest possible attention be given to the original layout now.

8. Considerable areas remain to be laid out and developed outside of the blocks already surveyed. These may be laid out a block at a time as the demand arises.

9. An adequate civic center seems to me essential to a plan of this kind. This civic center should include practically all of the public buildings, or those of community interest. Some of the buildings which apparently will be needed in this territory are (a) a

... I have ...
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sible attention be given to the
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... (a)

ranger's office, (b) a ranger's residence, (c) a post office, (d) a store, (e) a hotel, possibly two hotels, (f) a community building suitable for public meetings of various sorts, (g) an outdoor campfire, (h) an outdoor theater, (i) a schoolhouse with playground, (j) possibly a church. No doubt some of these items may be combined into a single building.

10. In this general area it will be desirable to develop some other enterprises, especially a public campground with its necessary campfires, latrines, etc.

11. The proper location of this civic center is a matter of the greatest importance and was carefully considered upon the ground. There can be no question but that the most desirable location is at the mouth of Hermosa ravine on a

- various other (d) a theater's
residence, (e) a post office, (f)
- where, (g) a hotel, possibly two
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concert, (j) an outdoor theater,
(k) a schoolhouse with playground,
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11. The proper location

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of the greatest importance and we
carefully considered upon the ground.
There can be no question but that
the most desirable location is at
the mouth of Lemmon ravine on a

tract which, unfortunately, has a somewhat clouded title. This location, however, is so much superior to any one which we were able to find upon land of unquestioned Forest Service title that I deem it well worth while to delay for a time any developments along this line, and in the meanwhile to make every effort possible to secure a clear title to the tract of land in question.

12. It is understood that as soon as the question of title can be cleared on the Hermosa ravine tract, a more detailed topographical survey of this area will be prepared, and that the writer will then undertake to develop a plan for the proposed civic center.

13. Owing to the physical and social character of the community

which it is proposed to establish here under Forest Service control, it seems highly desirable that some definite socializing influences should be set in motion, and it is hardly too much to expect that the Forest Service should take an active part in this necessary work. At least the Forest Service might provide the physical equipment for social activities. It can, for example, find a satisfactory site for a schoolhouse, and assist in the building of the school. Probably it can assist in a similar way toward the building of a community house, the provision of outdoor campfires, theaters, baseball diamonds, and other equipment designed to bring the residents of this territory into acquaintance,

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munity house, the location of
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halls, etc., and other equipment
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the territory into contact.

mutual confidence and cooperation. It is a common experience to find, in summer colonies of this kind, an aggregation of families who have no interests in common, who do not meet freely together, and who therefore remain in a community of suspicion and selfishness.

14. The provision of physical equipment, as suggested in the preceding paragraph, should lead to a better social acquaintance, and such social acquaintance should in turn lead early to some form of organized local self-government. In my judgment the officers of the Forest Service should hold themselves ready to assist in every manner toward such a consummation.

15. There is apparently an adequate supply of water available in the territory, providing it is properly developed and care-

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form of organized local ...
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... of the Forest Service should
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every manner toward such a ...

15. There is apparently
an adequate supply of water available
in the territory, providing
it is properly developed and ...

fully conserved. The Forest Service should certainly take the initiative in this matter. It should, if possible, develop and retain the water supply just as it is now building the Service road. At the very least, it must control the development of water by strict regulations, and not allow any portion of the supply to pass into private control.

16. There should be no timber cutting allowed on the area except individual trees here and there, principally dead and diseased specimens, duly selected and approved by the forest officer in charge.

17. Apparently it will be necessary to fence back the cattle now running on this range. I understand that the district office has entered into some sort of an agreement with the cattle owners operating in this district for the con-

struction of a "drift fence". Apparently no very clear idea is formed as to the character of this drift fence or its location. To my mind it seems probable that something more extensive and substantial than a mere drift fence will be required, and quite likely that the Forest Service will be compelled to undertake its construction.

Yosemite National Park

Although the Yosemite National Park is not under the management of the Forest Service, it was deemed advisable to visit it, inasmuch as we were in the neighborhood. Mr. C. H. Squire of the Washington office Forest Service accompanied me for a three days' visit, from June 7 to 9.

I was greatly impressed with the magnificent scenery of the Yosemite canyon. I found the floor of the canyon unexpectedly large and convenient for the accommodation of visitors. The administration appears to be excellent. The camps provided for visitors are clean and comfortable, the Desmond camps particularly so. It seems to me that they supply a model which should be carefully studied by all those who are interested in the administration of camps designed to care for any considerable number of transient visitors.

Perhaps the point which most impresses the landscape engineer in visiting this park, is the apparent lack of any constructive working plan. This defect seems to me very serious. The

Yosemite

present circulation of traffic is aimless and poor, and there appears to be no plan for future development along this line. The policy of building large tourist hotels within the canyon also seems questionable.

Mr. C. H. Squire and I also visited the Mariposa Grove of Big Trees on June 10. We found that a considerable mileage of good roads has been built in the area under the direction of the National Park Service. The location of these roads seems to have been in the hands of an engineer lacking the training of a landscape architect. There appears to be no working plan for the further development of the park.

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It would seem to me
that improvement outside in the

park forest would be a great advantage to the forest itself, and to the whole territory, considered as park scenery.

District 5

Huntington Lake and Vicinity

This territory was examined on June 11 and 12 in company with Mr. C. H. Squire of the Washington office, Forest Supervisor M. A. Benedict, Assistant District Forester Headley, and Ranger Barker. The following matters came to my special attention:

1. The road from Cascade (railroad station) to Huntington Lake is soon to be constructed. I understand, through cooperation of the Forest Service and Fresno County. This road is very much needed. I understand that the money appropriated will be used

to improve the right-of-way already established and now in use. On this right-of-way the grade is very steep, running from 18 to 20 per cent, and sometimes higher. It seems unfortunate that a better grade cannot be secured, but apparently a re-location is impracticable on account of cost. Under any circumstances, it seems probable that considerable sums will have to be spent from year to year in improvements and repairs on a road so much used and of such severe gradient.

2. We made an examination of the special use sites on the north side of Huntington Lake. A few cabins have already been built on permit areas, and many more permits will doubtless be in hand as soon as the road is completed and as soon as the

present engineering works on the dams are out of the way. The territory is unusually fine for such summer homes. The land itself is clean and well-drained, with a good slope, it is well furnished with splendid trees, the lake in the foreground is attractive in every particular, while in the distance there are visible several snow-clad peaks of the higher Sierras. Under these circumstances it would be desirable for the Forest Service to give special attention to the careful development of this territory.

3. The best portion of this territory has already been surveyed and subdivided into summer home permit sites in accordance with existing instructions of the Forest Service. Neverthe-

less, it appears to me that the layout is defective, and that a considerably better arrangement of the space could be secured by sufficient study. This is a matter to which I shall refer in a subsequent section of the report, and no further discussion need be given to it now. I would recommend, however, that the issuance of permits on this territory be suspended for the present, and that the question be carefully considered whether a re-survey is not worth while.

4. At the eastern end of this tract the city of Fresno has secured a permit upon 20 acres for a municipal playground. As yet the tract is undeveloped and unused, but I understand that as soon as road improvements are made the city of Fresno will enter

upon its permit and begin the active use of the playground. It is certainly in the interest of the Forest Service to make this enterprise successful, and I would suggest that possibly the Service might assist the city of Fresno in the proper planning of the grounds, and possibly in certain points of construction and development.

5. On the south side of the lake, the Fresno state normal school has a permit involving a considerable area, upon which several buildings have now been erected for the accommodation of a permanent summer school. At the present time this entire tract has the appearance of a freshly established lumber camp. In other words, it is raw and unattractive with a distinctly disorderly aspect.

If the normal school authorities have a well-matured plan for the future development of their grounds, there is nothing on the surface now to suggest that fact. It seems to me that the Forest Service should give every encouragement to the normal school authorities for the early preparation of a well-considered and orderly working plan.

6. The Forest Service has installed a water supply now serving the state normal school grounds and some of the special use permit area. This water supply can be extended to additional areas. This improvement is fundamental, has been cheaply and effectively made, and is altogether commendable.

7. At the present time quite extensive developments on permits are being made by the

Southern California Edison Power Company. Existing conditions about these works are exceedingly rough, but the grounds will doubtless clear up gradually as the work proceeds toward completion in the next few years. It seems to be very desirable that plans should be made at once by some competent landscape engineer for the contemplated improvements in order that all this work may proceed economically toward a satisfactory finished result. Presumably the landscape engineering service for such work should be employed by the permittees, but I would specifically recommend that the Forest Service urge the permittees to adopt such a course.

8. The village of Cascada exists wholly on Forest

Service permits. It began as a rough construction camp, and still has very largely the air of a frontier lumber town. It seems to be changing, however, somewhat rapidly from this temporary character to a condition of being a permanent summer resort. For this new purpose the entire character of the place ought to be changed, and though the area is quite restricted, and the conditions difficult, I believe that some substantial improvement in the plan can be made through careful study. I would therefore heartily recommend that the village of Cascada be given early and careful study in view of these conditions.

9. The Methodist local conference has secured a permit for a summer chautauqua to be located just below the village of Cascada. It is expected that this will become a per-

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manent and extensive institution handling a population of 1000 or more annually. Obviously this colony should be developed according to some plan. In my judgment it would be wise for the Forest Service to insist upon such a plan as prerequisite to the permit. Possibly the Forest Service can cooperate with the association in securing such a plan.

10. Along the county road between Cascada and Fresno in the Sierra National Forest area, are many superb views. These might be greatly improved by judicious cuttings and by small changes in the roadway. Probably the necessary improvements can be secured through action of the local supervisor.

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District 5

Angeles Forest,
Los Angeles Municipal Playground

This very interesting development on the forest area was visited from June 15 to June 19, inclusive, in company with Mr. C.H. Squire of the Washington office. Through the kindness of Mr. C. B. Haitt we were allowed to occupy one of the municipal bungalows, and to participate in all the regular activities of the camp. We greatly appreciated the opportunity and enjoyed the experience, and came away with the feeling that the enterprise is successful and socially sound. We believe that the plan ought to be rapidly extended to the service of many other municipalities, and that while many cities will find their best available opportunities outside the

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tended to the service of many other
municipalities, and that while many
cities will find their best avail-
able opportunities outside the

National Forests, there will be a considerable number of cities which can best be served by land now included within the forest boundaries.

This is a strictly municipal enterprise, financed and conducted by the city of Los Angeles through its efficient playground commission. The equipment consists of 61 bungalows furnished with beds, a central clubhouse, a kitchen and outdoor dining room, water supply, sewer system, concrete swimming pool, etc. The method of operation provides mainly for vacations in periods of two weeks for citizens of Los Angeles. I may say that the ground plan of this particular camp is surprisingly good. Indeed it is almost beyond criticism from the standpoint of the landscape engineer.

National Forest, there will be a
considerable number of visitors
which can best be served by food
now included within the forest
boundary.

This is a strictly scenic
area, situated, situated and con-
tained by the city of Los Angeles
through its national highway
connection. The equipment consists
of 61 bungalows furnished with beds,
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outdoor dining room, water supply,
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provided mainly for recreation in
periods of two weeks for citizens
of Los Angeles. I may say that
the ground plan of this particular
camp is comparatively new. Indeed
it is almost beyond belief that
the landscape of the landscape
remains.

Inasmuch as several other cities are contemplating the establishment of similar municipal playgrounds on the forest area, it might be worth while for the Forest Service to publish a brief bulletin making suggestions regarding the physical layout, equipment and management of such municipal camps. Certainly this information, in clear-cut, workable form, ought to be available immediately from some source. I am sure the Forest Service will feel like giving every assistance in its power toward the proper development of these municipal camps.

District 6

Oregon Caves National Monument

On June 23 I made a visit to the Oregon Caves in company with Mr. C. H. Squire of the Washington office, District Forester C. J. Buck,

and Supervisor N. F. Macduff. We were conducted through the caves by forest guard Rowley, whose enthusiasm, kindness, and practical assistance should be especially commended. He appears to be a somewhat unusual man, and especially adapted to the service he is now rendering.

The caves are large, intricate and curious. Apparently they are much enjoyed by some of the visitors, though I must confess to a distinctly qualified enjoyment of them myself.

It is my opinion that the caves are not of special national importance. Their interest is largely local. It would be contrary to my judgment for the Forest Service to spend any considerable sums of money in the development of this particular natural curiosity. It would seem proper for local talent

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of this particular natural curiosity.
It would seem proper for local interest

and local funds to be used in the development of the caves, of course always under direction and permit of the Forest Service.

The Forest Service might well improve the trails, particularly the one leading to the west side of the mountain. The trails to the cave lead through a most attractive country, especially the one toward the northeast. This trail is already well constructed, but might be improved in minor details, especially in opening out certain fine views which would be made available by quite minor cuttings. A few delightful campgrounds have already been established along these trails which should prove a great satisfaction to visitors.

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District 6

Eagle Creek Camp Grounds

On June 26 I visited the Eagle Creek Camp grounds, reached by the Columbia Gorge Park Division of the Oregon National Forest, over the Columbia Highway from Portland, Oregon. Eagle Creek Canyon has become a public park under highly intensive use. It is a remarkably fine piece of scenery, remarkably well situated to serve a large population. Here the Forest Service encounters a purely park problem in a fairly intensive form.

The work already done in the development of this campground consists in the building of a public sanitary connected by sewer with a good outfall, the introduction of a safe and convenient water supply, the building of numerous campfires,

On June 28 I visited the
Hagie Creek Canyon, located by
the Columbia River Division of
the Oregon National Forest, over the
Columbia Highway from Portland, Ore.
Hagie Creek Canyon has become
a public park under highly intensive
work. It is a remarkably fine place
of scenery, remarkably well situated
to serve a large population. Here
the present service consists of a
busily run road in a fairly in-
tensive form.
The work already done in
the development of this canyon and
consists in the building of a dam
its electricity connected by power with
a good outlet. The introduction of
a safe and convenient water supply,
the building of numerous cottages,

providing a considerable number of tables for visitors, the development of a large parking space for automobiles, and the building of a very attractive trail up the canyon. All of this work has been exceedingly well done and is beyond criticism, with the exception of the location of the public sanitary.

The various suggestions which I have to make, all of which were discussed with Forest officers on the ground, are as follows:

1. The parking space for automobiles will need to be enlarged.

2. The public comfort station, rather unfortunately located, must be masked by heavy plantings. Specific suggestions to this end were made on the ground.

3. A simple and convenient ranger station and office should be built on the front of the ground

providing a certain number of
spaces for vehicles, the develop-
ment of a large parking space for
automobiles, and the building of a
parking structure. The development
of this work has been completed
and it is beyond criticism,
with the exception of the location
of the parking structure.

The various suggestions
which I have to make, all of which
have been discussed with various officials
of the city, are as follows:

1. The parking space for
automobiles will need to be enlarged.
2. The public car lot
should be enlarged and located
near the main building.

The various suggestions
which I have to make, all of which
have been discussed with various officials
of the city, are as follows:

near the highway.

4. The camping spaces for automobiles should be enlarged, by preference placing them back from the creek, the creek being reserved for picnic grounds. Apparently there is some high land farther back from the creek toward the eastward, which, with some expense, can be developed for automobile camping.

5. The front of the grounds bordering on the highway will require some further cleaning up. This work is progressing as rapidly as opportunity offers.

6. The delightful trail along Eagle Creek has already been mentioned. The scenery can be somewhat improved in this territory by opening out a few of the more attractive views. At a number of places rustic seats should be provided, and probably a small public comfort sta-

At the existing station for
automobiles should be situated at
the station, the street being extended
for about 100 feet. It is
there is some high land further
back from the street toward the river
and, which, with some excavation, can
be developed for automobile parking.
4. The front of the grounds
bordering on the highway will require
some further clearing up. This work
is progressing so rapidly as to
cause delay.

5. The building will
along with the other buildings
be located. The property can be some-
what improved in the vicinity of
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five acres. In a number of places
probably a small public parking area

tion will be needed at some point three to five miles from the mouth of the canyon.

7. I understand that an application is pending for a resort permit, and that the applicants wish to build a hotel, preferably on the south side of the highway, and at the very front of the Forest Service campground. In my own judgment it is not necessary to grant any permit for a resort or hotel of any kind on these grounds, there being several resorts of this nature within easy reach of the canyon. It seems to me rather that the canyon should be kept as wild as possible, and should have a character entirely different from that of the ordinary road resort found along the public highway.

If a permit is granted, I would urgently recommend that the

location given should be on the north side of the highway, and outside the immediate environs of the picnic grounds. I feel sure that a resort placed on the south side of the highway and within the picnic grounds would soon monopolize a large part of this territory, would throw the Forest Service largely into the shadow, and would alter the entire character of this delightful picnic place.

District 6

Denny Creek Camp Ground,
Snoqualmie Forest

On June 28th I visited this tract in company with Mr. C.H. Squire, Assistant District Forester C.J. Buck, Supervisor Stanton G. Smith, and others. The tract lies about 50 miles east of Seattle on the so-called Sunset highway, near the main pass over the Coast range.

The ground at present is rough, and the territory decidedly wild. The scenery is good, and there is some good forest in the immediate neighborhood. Denny Creek is a fine stream with a promise of good fishing. There is ample opportunity for the development of a fine public camp ground facing on the public highway and fronting on both sides of Denny Creek. There is also an opportunity for the location of a rather indefinite number of lots for summer homes, most of which would lie further up the creek.

On account of the present rawness of the territory, rather extensive practical improvements will be needed to make the ground comfortable for campers. Most of these are provided for by appropriations already available and the work

was under way at the time of our visit. The one phase of landscape engineering principally involved has reference to the subdivision of the home sites. This problem was discussed on the ground with Supervisor Smith, and will be referred to again in more general terms in a later part of this report.

District 6

Rocky Run Campgrounds,
Wenatchee Forest

This territory was visited on June 29. The campground faces on Lake Kechelus. The scenery is unusually fine. There is a good stream, a good forest, and an attractive lake. The campground lies contiguous to the scenic Sunset Highway, and though barely opened at the time of our visit,

was already in use. It seems quite certain that this campground and other smaller ones near it will find extensive use in the near future.

There are also a few home sites to be let under permit and at least two resort sites already located.

The problems here are very simple and the forest officers in charge seem to have them thoroughly well in hand. No special recommendations need to be made.

District 6

Lake Chelan, Chelan National Forest

On July 1 and 2 I had the pleasure of visiting this section in company with several officers of the Forest Service. The scenery is superb, and I have no hesitation in offering the opinion

was already in use. It seems quite
certain that this arrangement was
other similar ones that it will
be a valuable one for the future.

There are also a few more
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On July 1 and 2 and 3
the planning of visiting this part
tion in company with several offi-
cers of the Forest Service. The
seems to suggest, and I have no
hesitation in offering the opinion

that this will prove to be one of the major recreation projects on the Forest area. Indeed these advantages are so conspicuous that they have led to a movement to have the territory set aside as a National Park.

There are along the shores of Lake Chelan, and in the contiguous mountains, many sites suitable for summer homes, for public resorts, public campgrounds, and all the other developments of summer recreation. Eventually the best of these sites will all be needed and they should therefore be carefully conserved.

Already home sites have been surveyed for permits at several places along the shores of Lake Chelan, especially at the mouths of the several tributary creeks. These surveys seem to me to be not quite satisfactory. I would make two

suggestions: (a) that the lots are too small, usually running about a quarter of an acre each; (b) that the general plan of survey has been characterized too much by the checker-board system in vogue in the towns and cities of the plains. In land of this character it would be much better to follow more closely the natural topography. Inasmuch as both these matters are to be discussed in subsequent reports, they may be passed over for the present.

I understand that the district office, District 6, has already recommended that the Secretary of Agriculture classify this area as chiefly valuable for public recreation and direct that it be administered with that use in view, after the manner of procedure used in the Columbia Gorge Park Division of the Oregon National Forest. I believe

that the District Office has prepared a general plan upon which such a departmental order could be based. This proposition seems to me wise, and meets my hearty approval.

Should such a step be taken, it would seem to me that the Forest Service would thereunder obligate itself to develop the territory properly as a public park. The very first and most necessary step toward such a development would be in the preparation of a satisfactory working plan. The preparation of such a working plan would present landscape engineering problems of the most fascinating character. There would be an opportunity here to do something of distinct credit to the Forest Service, and of large value to the public in general.

District 1

Seeley Lake, Missoula Forest

This wild and beautiful lake is reached by a good automobile road of about sixty miles out of Missoula. The surroundings are attractive and the fishing and hunting are good. One tier of summer home sites has already been surveyed around the lake, and the majority of these sites have been taken under permit. It seems likely that the demand will continue and that more lots will be needed. There is ample opportunity for the location of other summer homes back from the immediate shore of the lake, especially on the western side. In the location of such lots, a much less regular arrangement should be followed. The lots should be studied individually and located with considerable care.

On the west side, and near the outlet of the lake is an unusually fine site now reserved for a public hotel or resort. Inasmuch as the Chicago, Milwaukee, and St. Paul Railway is now building a line touching this particular tract, it would seem the part of wisdom to give that corporation a preference in using this hotel site.

One or two public camp-grounds will be needed along the shore of the lake and in the immediate vicinity. Some territory has already been set aside for this purpose but remains to be developed.

I would recommend further that the Forest Service should make special effort to preserve the wild game and fish in and about Seeley Lake. This territory at present is especially attractive on account of the hunting and fishing, and it would

in the west side, and now
the center of the lake is no longer
time also now intended for a public
hotel or resort. Located on the
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One of the public camp-
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shore of the lake and in the immediate
vicinity. Some territory has also
been purchased for this purpose
but remains to be developed.
I would recommend (would
that the present service should also
special effort to preserve the wild
game and fish in and about the lake.
This territory is proposed to
especially attractive on account of
the hunting and fishing, and it could

seem wise to conserve and intensify this natural attraction.

District 1

Beaverhead Forest

On July 7 a trip was taken through the Ritter Root and Beaverhead Forests in company with Assistant District Forester Major F. A. Fenn, and Mr. C. H. Squire of the Washington office. On this route an examination was made of the Big Hole battle ground, especially of the tract now reserved as a national monument. This spot has local historic interest, and seems to appeal strongly to the imagination of the old settlers. It is, however, nearly devoid of scenic beauty, or other recreational value, except that the old settlers hold an annual reunion here on the anniversary of the battle.

...in an extensive and interesting
this natural attraction.

THE SITE

THE SITE

On July 1 a party was taken
through the River Road and however
had passed in company with Anson
and District Forester Major W. A.
Hann, and Mr. C. H. Spaulding of the
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THE SITE

Plans have already been developed in the district office for the improvement of these grounds. The plans were checked over at the time of our visit, and seemed to be entirely satisfactory.

In my judgment it would be unwise for the Forest Service to spend any large sums of money in the development of this particular tract.

Forest Service Road: -

In passing from the Bitter Root valley over the Great Divide into the Big Hole country, and on to the eastward, one travels over the so-called "Park-to-Park" highway. A considerable portion of this highway was designed and built by Forest Service engineers and lies within the National Forest area. It forms a delightful scenic road which in all probability will attract large numbers

of tourists in future years. On this account I would recommend liberal treatment of the route, both as regards the improvement of the engineering work on the highway, and in the development of the landscape features. In particular, it would seem wise at once to develop good public campgrounds at several points along this highway, to provide the necessary safeguards for water, the desirable campfire places (especially as the timber here needs to be carefully protected from fire), the necessary latrines, etc. This work could be easily carried out at small expense under direction of the local supervisor.

District 4

On July 9 Mr. C. H. Squire and myself visited the district office in Ogden and consulted with

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this amount I would like to see
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the local supervisor.

On July 9, 1915, I visited the district at
and again visited the district at
then in Eden and consulted with

District Forester L. F. Kneipp and with Assistant District Forester C. W. Woods. While this district has some very interesting special use developments under way in the Sawtooth Forest and elsewhere, it was decided at the consultation to be unlikely that any of them would offer any new problems in landscape engineering not already covered by our investigations. It was determined therefore to proceed at once to District 2.

District 2

Denver Foothills Park

The city of Denver has developed some very interesting parks and automobile roads in the foothills to the westward of the city. Some of these tracts adjoin the Pike National Forest, and some of the automobile routes extend into the

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with Assistant District Forester
O. B. Woods. This this district
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to District 2.

The City of Denver has de-
veloped some very interesting aspects
of its landscape in the forest-
lands to the westward of the city.
Some of these tracts within the Pike
National Forest, and some of the
land is owned by the city.

Forest. It has been locally desired to develop these park facilities farther from the city and farther into the Forest, and especially to reach the summit of Mt. Evans and the high mountains in that vicinity with practicable automobile roads. This project has been given preliminary study by Mr. Frederick L. Olmsted, landscape architect, of Brookline, Mass., and the citizens of Denver now have the benefit of his report for guidance.

On July 11 I made a reconnaissance of the Pothill territory in company with Mr. C. H. Squire of the Washington office, and District Forester Smith ^{W.}Riley. The scenery is picturesque and striking, and the roads already constructed are fairly satisfactory. The general plan of developing the

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The general plan of developing the

roads and park areas appears sound, and it seems to me that the recommendations of Mr. Olmsted form a sufficient guide for the present. I judge that this entire plan will develop slowly however, as the city of Denver may find funds to devote to this purpose. I would recommend that the Forest Service, and especially the District Office in District 2, should keep in touch with the developments and should cooperate at all points where practicable. In the meantime the work of making roads and trails in the Forest itself may be influenced to some extent by the plans of the City of Denver. Any such modification of the Forest Service plans which can practicably be made in order to bring them into greater service for the people of Denver and the public in general, is wholly to be commended.

District 7

White Mountain Forest

The time from August 4 to 11 was spent in the White Mountain forests in company with Assistant Forester E. A. Sherman, Assistant District Forester H. O. Stabler, Supervisor J. J. Fritz and Forest Examiner W. D. Fletcher.

On May 4 we visited Dolly Copp farm where a number of summer home sites have been surveyed. The area is conveniently located, is attractive, and the plan of subdivision is unusually good. The plans for leasing this territory seem entirely appropriate to conditions existing.

On August 6 we stopped at Crawford's Notch and examined the tracts (Crawford purchase and Bretton Woods Company's tract) on which

condemnation proceedings for acquisition are pending. At the special request of District Forester W. L. Hall, I held a conference with Mr. William A. Barron, of the Crawford Notch Hotel Company, in order to familiarize myself with his point of view relative to future uses of these lands.

On August 8 we visited the Swift River valley and discussed certain special uses there under consideration; on the 9th we examined an active timber sale near Twin Mountain, and on the 10th visited Russell Pond. Various suggestions made to Supervisor Fritz at the time concerned minor matters and need not be repeated here.

With respect to the White Mountain Forest in general it is plain that landscape and recreation values occupy a relatively high

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place. In the minds of the New England population the conservation of the scenery certainly stands ahead of timber production, though the best informed citizens appear to realize that the two lines of service are not incompatible. Certainly one of the outstanding problems of Forest Service administration in this forest will always lie in the judicious balancing of these two utilities.

Under the law creating this forest it would seem obligatory that the purposes of watershed protection, streamflow regulation and timber production should not be neglected. While the landscape value is unquestionably very great and while the protection of this scenery is of the utmost importance, yet the preservation of the

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landscape and the practical creation of a national park cannot be made the prime purpose of the forest administration without evasion of the law and stultification of the Forest Service.

Nor in my judgment is any such course necessary. Certainly the protection of stream flow is wholly compatible with the preservation of the forests and the conservation of the landscape. The only doubt seems to attach to the work of timber cutting. Yet I feel sure that, with reasonable care, practically the entire product of merchantable timber can be harvested from these forests with negligible injury to the landscape. Up to the present time the public fear on this point has been, in my opinion, unwarranted. While the District Office

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has been, in my opinion, unjustified.

has wisely pursued a conservative policy thus far with respect to timber sales, and while the education of public sentiment is to be held always in view, I do not hesitate to advise a freer use of timber resources in the future. The selection method of cutting which I understand will be largely used will not produce serious breaks in the forest cover. Even strip cutting cautiously conducted by narrow strips need not offend any but the most pernicky taste. It is to be expected furthermore that methods of operation will improve as time goes on, and such improvements will permit freer cuttings. In the forests of the Old World the precedent has been well established for the liberal utilization of timber on forests where park use is also recognized as of first importance.

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My general recommendations for the White Mountain forest are as follows:

1. That a cautious and conservative policy be followed with respect to recreational developments, and especially where term permits for summer homes, resorts and hotels are concerned.

2. That a more liberal policy be pursued with reference to any municipal (social) uses which may make application, and that the Forest Service take such steps as it conveniently can to promote an interest in municipal enterprises, such, for example, as the Los Angeles Playground camp.

3. That the Forest Service proceed with such future timber sales as may seem wise from an economic and silvicultural standpoint, giving reasonable regard to the protection of the landscape.

By General Henderson

State of the Union Message

are as follows:

1. That a serious and

consecutive policy be followed

with respect to recreational de-

velopment, and especially with

view to the future of the

state and nation are concerned.

2. That a more liberal

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3. That the Forest Ser-

vice proceed with such future de-

velopment as may best be

economic and administrative stand-

point, giving reasonable regard to

the protection of the landscape.

but without feeling that positive timber values must generally be sacrificed to questionable esthetic values.

4. That in all cases where timber cuttings are made on areas intersected by public roads a border of trees be left uncut along these roads. This border should be of varying width, usually running from 100 to 500 feet. Even in these borders mild selection cuttings can sometimes be made.

5. That these timber borders along roads be given appropriate parkwise treatment. In particular I would suggest -

(a) That vistas be opened through these borders wherever good exterior views are available.

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(b) That due caution be exercised to keep an open view of the road for the protection of automobilists.

(c) That a rigid wall of trees with sides straightly paralleling the roadway be not formed, but that as much irregularity and informality as possible be secured.

(d) That considerable care be used to keep a pleasing border of native shrubbery between the roadway and the tree belt.

6. That public camp grounds be developed at suitable points.

(b) That the same

shall be maintained

to keep an open view

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mobilists.

(c) That a right

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(d) That the same

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a pleasant border of

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tween the roadway and

the tree belt.

e. That public road

be developed as a public highway.

(This point has been especially discussed with Supervisor Fritz).

7. That scenic trails and automobile roads be built to the better points of beauty on the forest. This recommendation should be followed slowly and cautiously, and all routes given careful study before the beginning of construction. Such roads and trails may be built by private persons or organizations, but the Forest Service should make sure that the locations are quite satisfactory. In general all locations for scenic roads should be studied by some competent landscape architect.

8. That certain areas of paramount scenic value be specifically reserved. Upon these areas timber cutting may be wholly interdicted, as well as any other

(This point has been previously discussed with Supervisor White).
7. That scenic trails and automobile roads be built so the better points of beauty on the forest. This recommendation should be followed slowly and cautiously, and all routes given careful study before the beginning of construction. Such roads and trails may be built by private persons or organizations, but the Forest Service should make sure that the locations are quite satisfactory. In general all locations for scenic roads should be studied by some competent landscape architect.

8. That certain areas of paramount scenic value be especially reserved. Upon these areas timber cutting may be wholly prohibited, as well as any other

uses which might infringe upon their scenic value. I especially recommend that appropriate steps be taken at an early date to determine what areas should be so reserved, and that upon this determination prompt action be taken.

9. That the entire question of policy, with special reference to park and recreation interests, in the White Mountain Forest, be held open for further study. It appears to me that the situation has not yet fully developed. It would be unfortunate to establish a fixed policy in these matters with important factors changing or uncertain.

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reference to work and research in
forests, in the White Mountain
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situation has not yet fully de-
veloped. It would be unfortunate
to establish a fixed policy in
these matters with important factors
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General Policies

From the beginning the National Forests have been extensively used for purposes of recreation. Thousands of persons have gone to them for rest, for enjoyment, and for the recuperation of health. The forests have inevitably included within their boundaries much of the most satisfying landscape of the country, and this fair scenery is recognized as having a large human value above the mere economic return from timber, water power or grazing.

Indeed the forests - and especially state and national forests - have always included within their utilities many recreation features. The earliest known forests were set aside as game preserves and became hunting grounds of royalty. In more recent times the famous forests of

Central Europe have been extensively used for many sorts of recreation. The pressure of such interests has been so great as to obscure and almost to obliterate any distinction between forests and parks. Indeed it is only fair to say that recreation, the conservation of health and the preservation of scenery are traditional utilities from the very beginnings in forest policy.

In the National Forests of the United States these activities were at first ignored. Later they were tolerated and to some extent assisted. It would be absolutely impossible to prevent them. It now seems clear that they should be frankly recognized, appraised at their just value, and given protection and assistance according to their worth in fair comparison with

General purpose have been extensively used for many years of the oxidation. The process of such interest has been so great as to obscure and almost to obliterate any distinction between forests and parks. Indeed it is only fair to say that restoration, the conservation of health and the preservation of scenery are traditional utilities from the very beginning in forest policy.

In the National Forests of the United States these activities were at first ignored. Later they were celebrated and to some extent assisted. It would be almost entirely impossible to prevent them. It now seems clear that they should be frankly recognized, appreciated at their true value, and given protection and assistance according to their worth in later comparison with

other forest utilities.

I understand that my personal assignment in the Forest Service was intended primarily to define more clearly the position of these special utilities in a general scheme of forest policy. This is certainly the central point round which my studies have revolved. I have tried to view these utilities without the prejudice of my profession in their just relation to other primary purposes of the National Forests. I count it a great good fortune that my visits to the Forests have brought me into contact with the men who have the actual experience of local administration and who know existing conditions and demands. Many of these men are fortified by years of practical experience and armed with the keenest enthusiasm. Association

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with such men is admirably calculated to correct the defects natural to my academic and professional view.

At the same time I must urge that there is a substantial advantage in my detached position. If my view is inexperienced it is also unprejudiced. And the fact that my professional training gives me a point of view different from that of the usual forest officer is of real value, since a new point of view is certain to reveal new data, unsuspected conditions and fresh opportunities for improvement.

It has been my fixed purpose throughout this study to consider recreational and esthetic values, not as matters apart, but in their due relation to the well-established and unquestioned

with each man is a different relation
to the world and to the world's
view.

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view is of real value, since a
new point of view is certainly to be
valued as a new light, unobscured
light and from a different
direction.

I have seen my friends
whose conception of life is
entirely practical and selfish
values, not as matters of fact, but
as things that are to be used.

utilities of the National Forests. While the present report deals almost exclusively with questions of scenery and of recreation, such treatment is necessary to the nature of my assignment and is not due to my wilful neglect of timber production, grazing or watershed protection.

Extent of Recreational Use

Some effort has been made in the Office of Lands to secure figures showing the number of persons using the Forests for purposes of recreation. This effort has not been very vigorously pressed and the figures secured are fragmentary and doubtful, being in many cases certainly incomplete and below the facts. Still they may be reproduced here as a basis for the personal estimate which I will presently offer.

Director of the National Bureau.

While the present report deals with

most extensively with questions of

accuracy and of restoration, such

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ESTIMATED NUMBER RECREATION VISITORS ON FORESTS SUMMER 1916

Dis- trict	Resi- dence Permit- tees	Campers	Hunters and Fisher- men	Auto- mobile Passen- gers	Other Trav- elers	Pedes- trians	Total
1	524	22,068	36,624	66,884	14,325	11,704	152,129
2	3,239	19,040	61,173	301,860	220,672	61,113	667,097
3	597	6,840	11,945	67,350	38,580	1,490	126,802
4	354	29,422	35,186	100,082	21,102	6,242	192,388
5	6,150	266,425	84,275	214,100	55,075	84,600	710,625
6	853	36,993	42,590	244,795	29,653	7,674	362,558
7	178	7,867	6,765	98,085	150,135	13,490	273,520
	11,896	388,655	278,558	1,090,156	529,542	186,313	2,485,119

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Note: Care has been taken to avoid duplication in the above totals. Each person has been classed according to the principal use made of the Forest. For example: A fisherman may have traveled in an automobile or an automobilist may have stopped to fish, but in no case has he been counted in more than one column. Estimated average time spent by visitors in Districts 1, 4, and 6 is 2 days, 14½ hours. This period, it is believed, will closely approximate the length of time so spent for all Districts.

ESTIMATED MONTHLY REVENUE STATEMENT

FOR THE MONTH OF JANUARY 1916

Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Admission	11,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	120,000
Concessions	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000
Amusement	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	36,000
Refreshments	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	24,000
Transportation	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000
Other	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000
Total	23,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	252,000

Note: The above statement is based on the assumption that the attendance at the fair will be approximately the same as in the corresponding months of the previous year. It is understood that the actual results may vary from these estimates.

Mention of a few specific cases will give a better notion of the real situation. In the Canyon Santa Anita, Angeles Forest, for example, there are nearly 200 summer homes. Allowing a family of five to each home we would have a population of 1000. Moreover there are three small public resorts (embryonic hotels) in the canyon accommodating a total of fifty to a hundred persons additional. There is also a considerable number of visitors constantly passing through the canyon on foot and on horseback. It seems conservative to estimate the use of this little section of the forest at 1200 persons daily for six months of the year.

Eagle Creek Campground on the Oregon Forest is a small tract, but one which, from the nature of its location, receives rather in-

tensive use. On Sundays during the summer the attendance often reaches 2,500 to 3,000 persons. On week days the attendance is smaller, but considerable. It seems safe to estimate that the annual attendance is not less than 100,000 persons making an average stay of five hours each.

The White Mountains in New Hampshire are intensively used for purposes of recreation by the crowding populations of our large eastern industrial cities. This use covers both winter and summer, though the number of visitors is greater in summer. Fishing, camping, tramping, automobile, and gossiping on the hotel porch are the most popular recreations; but whatever specific forms the recreation may take, its ultimate

foundation is upon the forest covered mountains. When we consider the endless summer procession of automobiles on every White Mountain highway; when we remember that one single hotel accepts more than 1000 guests at a time; when we think of the thousands of smaller hotels and boarding houses in and around the mountains, it is a ready guess that the number of visitors must pass the half-million mark annually.

I have named three tracts and estimated the number of visitors, as follows:

Canyon Santa Anita,
Angeles Forest, 1200 persons
daily for six months, which,
counting at ten hours a day would
amount to 2,190,000 hours of recreation.

Eagle Creek Camp Ground, Oregon Forest, 100,000 persons a year with an average stay of five hours each, amounting to 500,000 recreation hours.

White Mountain Forest of New Hampshire with a half million visitors annually, for whom an average stop of one day each would be a very low guess, would give 5,000,000 hours of the most wholesome and upbuilding recreation imaginable.

Combining these guesses we have an estimated use on these three tracts of 7,690,000 recreation hours annually. And while I have chosen these three cases from the best known recreational resorts on the National Forests, it is to be observed that two of them are very small and restricted areas, while the White Mountain Forest is

still one of the smallest of the National Forests. If we think of the vast areas which our estimate must cover, of the fine and famous scenery included, of the automobile roads traversing many of these Forests, of the hotels along their borders, of the unsurpassed hunting and fishing, we must conclude that the total number of visitors is very considerable. The lowest estimate which I can make after much study is that the visitors annually number not less than 3,000,000 with an average stop of ten hours each. I believe that the former figure is reasonably near the fact; the estimate of ten hours for each visitor is merely a vague guess, but is conservative. The estimate of the forest officers places this factor at fourteen and a half hours. I

am confident that we are well within the truth when we say that the annual recreational product of the National Forests amounts to thirty million recreation hours.

Valuation of Recreation

When we attempt to place a monetary valuation on this body of recreation we are upon still more uncertain ground. Still such an estimate is not wholly impossible, and the formation of concrete standards in this field is so sorely needed that we may well hazard the attempt.

Mr. George A. Parker, Superintendent of Parks of Hartford, Connecticut, who is generally regarded as the highest authority in such matters, has been in the habit of speaking, among his professional brethren, of a valuation of two cents per recreation hour.

He hastens to say, however, that this rate represents only the normal cost of park recreation and bears no necessary relation to the value, which must certainly be much higher.

It is fair to judge the value of recreation by what it costs in the open market. Everywhere recreation is on sale, and vast quantities of it are bought daily by eager consumers. This recreation varies greatly in value and enormously in cost. The nabob with his touring limousine and hired chauffeur often pays \$20 an hour, while the tramp who lays a nickel on the bar may enjoy, for that small price, an hour's visit with his cronies in the establishment.

We are very near to scientific exactness when we say

that the cheapest forms of recreation purchasable in the markets cost five cents an hour. These amusements would include the bar room, the cheapest movies and their like. The first attempt to name these amusements will show that they are not wholesome, not truly recreating, not socially defensible.

A little further reflection along this line will convince us that ten cents an hour represents the minimum cost of wholesome recreation when bought in the regular markets. Here we might include the ten cent movies, the cheapest seats at the theater or the concert, etc.

This is the minimum cost of wholesome recreation. The average cost is much higher.

It seems self-evident, further, that ordinary recreation on the Forest is at least as valuable as the cheapest wholesome commercialized entertainment; so that if we adopt as our average rate for the valuation of forest recreation the minimum cost of decent commercial recreation, viz. ten cents an hour, we are obviously offering an underestimate. Yet if we adopt this minimum rate instead of a fair average rate, the annual recreational product of the National Forests assumes a monetary value of \$3,000,000. And once more we may say that this is based, not on averages, but on minimum figures.

I ought to say that on this point I have consulted Mr. Frederick Law Olmsted whose authority in such matters we all recog-

nize. Mr. Olmsted frankly does not place much reliance on this method of estimating recreation values. He suggests however that a much better result could be reached by determining the cost of forest recreation in its own character, for example by ascertaining the amounts paid by individuals for hunting and fishing in private preserves and sportsmen's clubs. The briefest consideration of these forms of recreation, however, will show a cost factor very much higher than that already given - at least one dollar an hour being the lowest possible guess. It seems to me unfair and dangerous to apply any such factor to the estimate in hand; and I am compelled once more to fall back on my statement that a rate of ten cents an hour for

forest recreation represents, not an average value, but a manifest minimum.

At the present time the actual returns from the National Forests for special uses - chiefly recreational - are over \$100,000 a year. Yet recreation use, like watershed protection, does not express itself in terms of forest income. In other words the cash return from special uses bears no necessary relation to the value of the recreation, considered in terms of human health, personal welfare or social efficiency.

When carefully considered it seems quite clear that the recreational product of the National Forests constitutes a public utility of very great value. Plainly it becomes necessary, in any wise consideration of public policy, to

conserve the esthetic and recreational values in the Forests and to provide for their wider and wiser utilization.

FOREST SERVICE AND PARK SERVICE

At this point we meet a large question of public policy on which we cannot honestly remain uninformed, indifferent or inactive. Congress has established both National Forests and National Parks and has placed the care of these two allotments in the hands of different organizations located in different departments of the public service. Every study of the situation shows striking similarities in the work of the two services. Indeed at many points their activities are identical.

It is perfectly plain that there should be a clear understanding and a considerable degree of coopera-

between the two services. This necessity has so much impressed some observers as to lead to the suggestion that the two services be brought into the same government department, or even that they be consolidated into one organic unit. Certainly under existing conditions the officers of the Forest Service should make every effort to reach a sympathetic understanding with the officers of the National Park Service and should cooperate with them in every possible way for the protection of all the property committed to the care of either and with the purpose of rendering the widest possible service to the public, remembering that amongst ordinary lay citizens the distinctions between Forest Service and Park Service are less than imaginary.

Some students of public policy who have given much thought to these matters have felt it wise to emphasize the difference between the Forest Service and the National Park Service. To me this seems false emphasis. It throws the stress away from points of vital likeness to differences which are largely accidental or artificial. The truth is that the distinctions between National Forests and National Parks or between the Forest Service and the Park Service are almost wholly administrative. They do not greatly concern the aggregate public interest.

Conditions in
the National Forests

As a matter of fact many of the areas now administered by the Forest Service are public parks, nothing less nor more. The Grand Canyon - a somewhat anomalous case -

is everywhere recognized as a great national park without reference to its administrative connection. Practically all of the national monuments under administration of the Forest Service are purely park reserves. Every public use which they might conceivably meet is a park use and not a forest use, in the limited meaning of that term. Hundreds of restricted areas within the Forests, not segregated by legislative act, are nevertheless definitely assigned by the authority of Forest Service officers to exclusive recreational uses, - as for example, Eagle Creek Camp Ground, on the Columbia Highway, the Los Angeles Playground in the Angeles Forest, and the miles on miles of canyon and lake-front surveyed for summer home permits.

The most logical statement of the facts is made by saying that recreation stands on a par with other major uses of the forest areas, and is to be managed on its merits precisely like the others. These major uses are

- Timber production
- Grazing
- Watershed protection
- Recreation

And from the figures given in an earlier section of this report it would appear that recreation is by no means a negligible member of this group.

Now the policy with respect to handling these several utilities on the forest areas has never been obscure. Where two or more of these main uses can be served at the same time on the same area they are carried forward side by side, sometimes in actual cooperation. Whenever two of these uses

come into conflict some authority determines which is likely to render the greater public service.

This then becomes the paramount use on the area in question. Other uses are secondary; and, if they interfere seriously with the primary use, they are altogether excluded from the area. This policy is so obvious, simple and practical that it needs no defence.

Moreover this policy need not be changed in the slightest when recreation comes to be recognized in the list of major utilities. It is, in fact, the policy already and inevitably adopted. On the principal areas of the National Forests recreation is an incidental use; on some it is a paramount use; on a few it becomes the exclusive use.

This policy is so broad and so fundamentally sound that it

is quite capable of covering the National Parks as well as the National Forests. If all the Parks and all the Forests were combined tomorrow under one management this policy would supply a perfectly safe guide for their administration. There may be valid reasons for emphasizing a distinction between National Parks and National Forests, but this is not one of them.

With respect to this matter as it affects the internal workings of the Forest Service alone some emphasis should be placed on the fact, frequently not recognized, that the recreation use on forest lands only rarely interferes with other uses. In general the natural development and protection of the forests operates directly to enhance the recreation values. On

the other hand recreation, except where it becomes intensive at certain points, seldom infringes upon other uses of the forest. The development of this fact has been, in some cases, rather surprising. For example it has been found, contrary to common expectation, that the presence of campers and summer home permittees in considerable numbers, instead of increasing the fire risk has actually assisted positively in fire protection. Any general argument therefore which alleges a conflict between the recreation uses and other forest utilities starts from a premise which is not true.

Forest Service
Recreation Policy

Under these circumstances the course to be pursued by the Forest Service is as plain as the main

street at midday. This latest comer into the family of forest utilities is to be treated precisely like the older members of the group. It is to be accepted as a permanent utility and as one of high and unquestionable value. It may even be expected that this particular utility will grow much more rapidly than her older sisters within the next few years. Such growth is not to be discouraged but is to be wisely directed. The following steps seem necessary:

1. The Forest Service should make a thoroughgoing study of recreation as a public utility and should develop a clearly understood policy with reference to it.

2. The Forest Service should attempt to forecast the public needs in recreation on the Forests and should shape its plans to

anticipate these needs to the utmost.

3. In the study of these broad questions of public policy the Forest Service should call to its aid to the fullest extent possible those men who, by breadth of training and by experience in such matters, are best able to advise in this specialized field.

4. In carrying these policies into practical effect many technical problems are confronted, mainly of a landscape engineering nature. These problems should be handled by men technically fit, just as the technical problems of silviculture, grazing and mining are now handled.

5. In general, and most important of all, the Forest Service should anticipate the specific problems of recreation, and

should meet each problem with definite plans, practicable, workable, well-studied, technically and artistically sound. In all these developments the Forest Service should lead, not follow its permittees and guests; it should supply initiative rather than restraint; it should operate through vital growing plans rather than through dead official measures of regulation.

Future Park Status

The development of exclusive park uses on considerable areas of the National Forests promptly raises the question whether these areas should not be transferred from the Forest Service to the administration of the National Park Service. The presumption at the outset certainly would be in favor of

such a step.

The first and most practical objection to this proposition lies in the fact that the areas of exclusive recreation use are (with the exception of the Grand Canyon) relatively small, so that their administration by the Forest Service along with the larger contiguous forests is simpler and more economical than it would be under another bureau not already operating in the same territory. Furthermore it is difficult, whatever the theoretical arguments, to show any practical advantage to be gained by such a transfer.

Even the theoretical argument - viz. that park utilities should be administered by the Park Service and the park lands therefore segregated from the forest lands, largely loses its force the

moment we see that, under any conceivable arrangement, very extensive recreational uses will always exist in the forests, and that it is wholly impracticable and unnecessary to interdict such uses. The segregation of park uses from other forest utilities, except upon a few special areas, is practically impossible and administratively absurd.

This whole matter, however, has more than an academic interest to the Forest Service. The popular imagination is just at present seething with the idea of National Parks. The very great value of these reserves is just beginning to be appreciated; and in particular the advertising value is being seized upon by many interested persons, corporations and municipalities. There is an ill-considered and unseemly campaign developing with the

purpose of securing new National Parks in all sorts of places. The very large majority of these projects are plainly based on no other intention than to secure local advertising. In hardly a single case has the need of the nation as a whole been considered for a moment. In short the projects put forward are not for National Parks at all, but for purely local parks. Some of these schemes would be advisable as state parks, some as city parks, while some could hardly be justified as public parks on any grounds.

The disquieting feature of this propaganda, viewed from the standpoint of the Forest Service, is that a good many of the tracts of land thus proposed for "national" parks now belong within

the National Forests. The removal of these tracts to another bureau would in some cases seriously break in upon present units and disturb present plans of management. If the practice should become prevalent of cutting heedlessly into the Forest areas wherever some local interest might need the advertising advantage of a "national park" the result would be distinctly damaging to our whole National Forest enterprise.

Only one position is open to the Forest Service in the premises. First consideration must be given to the needs and desires of the nation as a whole. If it appears that certain tracts now included in the National Forests will give their greatest public service when administered as National Parks, then the Forest Service will

unquestionably facilitate to the utmost the delimitation of such areas and their transfer to another administration. The Grand Canyon may be cited as a territory recommended by the Forest Service for transfer to the Park Service.

In order to establish the desirability of such a transfer it would be necessary to show:

1. That the territory is of such a size, location and character as to form a practical administrative unit when segregated; for, even though the use be exclusively recreational, yet if the administration can still be best conducted by the Forest Service there is no offsetting advantage in transferring the tract from one government bureau to another with a loss of administrative efficiency.

2. That the scenic or recreation features of the tract are of genuinely national importance, as the geyser basin of Yellowstone National Park, the glaciers of Glacier National Park or the cataract of Niagara Falls.

3. That such features are unique and not to be preserved here or elsewhere without the intervention of public authority.

4. That the natural landscape features or recreational advantages constitute the paramount utility, other utilities being distinctly subordinate.

In the meantime, and in part to neutralize the excesses of the current agitation for "national parks" which are not genuinely in the national interest, it seems proper and wise for the Forest Service to take certain positive steps, as follows:

1. To arrive at and to define a constructive and vigorous policy in respect to the development and administration of recreation values within the National Forests, as recommended in an earlier section of this report.

2. To acquaint the public widely with these policies and with existing conditions of recreation within the Forests.

3. By public proclamation to dedicate to exclusive recreation service certain areas of special scenic beauty and recreational value.

4. To secure from Congress a general act empowering the President to set aside by proclamation certain areas within the National Forests to be dedicated to paramount recreational uses, without change of administration. Such proclamations should describe boundaries and specify uses.

5. To secure the necessary authority and the even more necessary appropriations for the proper development of such areas, as the public interest may require.

Working Organization

In the foregoing sections of this report I have made three recommendations which should now be followed to their natural conclusion. These are - (a) that the Forest Service work out and adopt broad policies with reference to the development of the recreation utilities in the National Forests, (b) that appropriate administrative methods be discovered and adopted for these recreational developments, (c) that all recreation areas be planned by the best available talent, that is by men especially trained as landscape architects, and that such

plans in every case precede the expenditure of funds for recreational improvements. We must now consider the means whereby these recommendations may be carried into effect.

As regards the first matter, that of policies, a good deal has already been done. Many of the men in the Forest Service have been thinking seriously about the questions for several years. Their observations and conclusions are of the utmost value. It is hoped, too, that the present report and the study out of which it has grown, will assist somewhat toward the clarification of ideas, and in outlining workable policies.

I would recommend further that, as soon as practicable, an official statement of policies be drawn up in the Forest Service,

that this be submitted first to the criticism of men within the Service and to the Secretary of Agriculture, secondly to a considerable number of men on the outside, men who have had experience in large affairs and especially in public recreation, men whose criticism would be valuable. Most of these men, if asked directly for their criticisms, would give valuable aid. Such organizations as the National Art Commission, the American Institute of Architects, the American Society of Landscape Architects and the University Landscape Architects' Society should be consulted. Lastly it might be worth while to submit this statement of policies to the public through the press with the two-fold expectation of secur-

ing further helpful criticism and of acquainting the public with Forest Service policies.

Such an undertaking as this would require to be pressed rather sharply in order to put it through within a reasonable time and to prevent its becoming dissipated into a running fire of aimless talk. But the effort to state clearly the policies of the Forest Service in a manner to bear all this criticism will certainly result in a better definition of purposes in hundreds of minds where now there is only a vague belief that perhaps the Forest Service ought to do something - nobody knows what - nor very much cares.

Administration

The development of the necessary administrative methods

is possibly the easiest step in the program. The field administration of the Forest Service, while reasonably touched with the usual human imperfections, is notably courageous and efficient. These men in the field have taken hold of the new recreation problems with enthusiasm. Yet there is an occasional note of doubt, almost of dismay. Many of these men feel rather keenly that this new work is outside their training. One of the best supervisors whom I met in my entire rounds of the Forests said desperately, "There are so d----- many of these new things coming along that we have no time left for forestry!"

Constant improvement in administration of recreation will naturally come with experience. Much more can be gained by vigorous

action in the right direction.
Toward this end I would make the following recommendations:

1. That a small committee be formed within the Forest Service to make a continuous study of all questions connected with recreational uses on the Forests, such committee to suggest improvements in administrative methods whenever possible.

2. That this committee be authorized and instructed to make special studies and recommendations with respect to the classification of lands for recreational uses.

3. That from time to time the Forest Service secure the advice of park superintendents and playground supervisors who have been notably successful in such matters. This help can

be easily secured without great expense, I believe, if the men are approached in the proper manner.

4. That men trained in landscape engineering, in park administration or in playground supervision be found and put in charge of those areas where park and recreation uses become paramount or exclusive. There is no more propriety in leaving a forest park in charge of a ranger whose training has been on the cattle range than there would be in placing a park superintendent in charge of a purely grazing forest.

5. In general I urge that to the utmost these projects be left in the hands of competent and tactful men and the restrictive regulations be

kept down to the absolute minimum. It is one of the deadliest dangers of all government administration that it shall express itself in a maze of rules, regulations, restrictions and red-tape. The great substitute for rules is men. Let us have men of ideas, enthusiasm and tact and we can live on a very low minimum of rules.

Physical Plans

More depends upon correct physical plans than would appear at first sight. "Well begun is half done," and the working plan should be the beginning of every land development for recreation. Unless the ground is conveniently planned and equipped the activities upon it will always be crippled. Where a new development is begun without a well-considered plan mistakes are

easy - almost inevitable, - and such mistakes are expensive.

It seems most probable that for the next few years the development of home-site areas, playgrounds and special park tracts, and even of town-sites upon the National Forests, will be extensive and important. To prepare suitable plans for these projects, practical, technically sound and artistically effective, will require the services of one or more first rate landscape engineers. After considering carefully how this service could be made available at the least expense and with the greatest efficiency I would recommend:

1. That a competent man technically trained in landscape architecture and with as much practical experience as

possible be attached to the general staff, and that his entire time be devoted to work of this nature.

2. That other men of similar training and experience be employed in the different Districts, at least one man in each District, to whom shall be assigned the making of such surveys and plans as may be required, subject to such direction and assistance from the chief landscape engineer as may seem advisable.

This step would be much less difficult and expensive than might at first appear. The district landscape engineer would not necessarily occupy his full time on purely landscape designing. He would almost certainly be a surveyor and a draftsman, and as every district has extended

work in these lines, he could be used to good advantage whenever his services were not required in strictly professional lines. Or the district landscape engineer might be the regular superintendent (supervisor or forest officer in charge) of some important recreation development within the district.

The Forest Service now employs civil engineers, mining-engineers, grazing specialists, entomologists, lawyers and men specially trained in a great variety of other lines. A branch of work so new and so important as recreation and involving so many technical details can not, compatibly with the traditions of the Forest Service, be left to men lacking the best technical equipment.

3. Finally the Forest Service should find it possible to secure help on various plans from time to time from sources outside the official organization. Should the Forest Service be able to employ the services of professional landscape architects upon major projects, such a course would be in the highest degree advisable. While the writer continues to occupy his present collaboratorship it will be possible for him to do a small amount of primary planning and more frequently to pass upon plans prepared by others. This collaborative connection could probably be established with other landscape engineers whenever it may appear to be in the interest of the Forest Service.

Current Problems

My recent visit to the several districts has shown that problems of two types are especially exigent. The first has to do with road and trail building, the second with the subdivision of land for summer-home permits.

Thousands of miles of roads and trails are built upon the Forests for administrative and other purposes. Practically all of these are used more or less for recreation, - some of them quite extensively. In certain instances roads and trails are being built primarily for recreation service. Practically speaking the recreation use of trails never interferes with their administrative service, so that we may feel free to

develop the recreation values of these roads and trails to the utmost.

Such development involves the technical application of a few simple principles of landscape engineering which need not be rehearsed here, but which might be presented in printed form so as to serve as a practical guide for forest rangers engaged in trail location. Such instructions might enable the ranger to make the landscape along his trails much more effective for the passerby. If this suggestion should be approved by the Forester I will endeavor to prepare some instructions of this character at an early date.

The problem of land subdivision stands in precisely

the same status. While it will be much better to employ on each one of these problems some man of proper technical training, experience and taste, and while the organization already recommended should make such men available presently for such work, nevertheless something may be accomplished in the meantime by supplying supervisors and rangers with a few simple suggestions for the application of the principles of landscape engineering to those subdivision surveys which must be handled now. With the approval of the Forester I will undertake the preparation of such written suggestions.

Personal

I cannot close this report without an expression of my personal satisfaction in the opportunity afforded me for the study of so large and interesting a problem, of the delight I have found in visiting the splendid domain of the National Forests, of grateful recognition of the manifold courtesies received at the hands of forest officers everywhere, and of admiration for the skill, devotion and esprit de corps of the entire personnel.

Respectfully submitted

Collaborator

Amherst, Massachusetts
October 1, 1917

LETTER

I have just received your letter of the 10th inst. and am glad to hear that you are well and happy. I have been thinking of you very much lately, and wondering how you are getting on. I hope you are still as healthy and cheerful as ever. I have been very busy lately, but I have managed to find some time to write you. I have been thinking of you very much lately, and wondering how you are getting on. I hope you are still as healthy and cheerful as ever. I have been very busy lately, but I have managed to find some time to write you.

Yours truly,
[Signature]

THE UNIVERSITY OF CHICAGO
CHICAGO, ILL.

1	AUTHOR	<i>Wang</i>
F769W	TITLE	<i>P. 6</i>
		<i>AUG 24 1934</i>
		<i>AUG 24 1934</i>
		<i>AUG 24 1934</i>
		<i>AUG 24 1934</i>
JUL 22 1935		<i>AUG 24 1934</i>
APR 13 1938		<i>AUG 24 1934</i>
		<i>APR 13 1938</i>
JUN 18 1940		<i>APR 13 1938</i>
		<i>JUN 18 1940</i>
		<i>JUN 18 1940</i>

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